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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/719,445	11/21/2003	Edward W. Miller	02-414B	3024

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LAW OFFICE OF CARL D. CROWELL
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EXAMINER

BRAKEWOOD, CANDACE ELIZABETH

ART UNIT	PAPER NUMBER
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3721

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/719,445

Applicant(s)

MILLER, EDWARD W.

Examiner

Candace Brakewood

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) 3,5,11 and 12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4 and 6-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 November 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 5/13/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election of invention I, which corresponds to claims 1-10, and species 2 in the reply filed on March 13, 2007 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claims 11-12 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on March 13, 2007.
3. The applicant also stated that all claims of the elected invention are readable on the elected species. The examiner asserts that claims 3 and 5 are not readable on species 2, because species 2 does not include a flat contact end or a cone-shaped contact end. Therefore, claims 3 and 5 are withdrawn from further consideration.

Drawings

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 34, 36 and 38, as found on page 7 of the specification. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New

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Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

5. Applicant is reminded of the proper language and format for an abstract of the disclosure. The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details. The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

6. The abstract of the disclosure is objected to because it is in claim format. Correction is required. See MPEP § 608.01(b).

7. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: claim 6, the impact head is made of silicone rubber; claim 7, the impact head is made of plastic; claim 9, the central insert is made of rigid plastic; and claim 10, the central insert is made of semi-rigid plastic.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-2, 4 and 7-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Huang (2002/0169400). Huang ('400) discloses an impact head assembly (Fig. 5) having an impact head (66) with a contact end (72) and an attachment end (the flat surface opposite 72). Huang ('400) further discloses an impact head center bore (70) and an annular slot (undesigned – the slot surrounding the bore, 70, Fig. 5).

Regarding claim 2, Huang ('400) further discloses a central insert (56).

Regarding claim 4, the contact end (72) is round (Fig. 3).

Regarding claim 7, Huang ('400) discloses the use of plastic for the impact head (paragraph [0024]).

Regarding claim 8, the central insert is threaded (Fig. 5).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Huang (2002/0169400) in view of Isaacson (4,479,495). Huang ('400) discloses the use of

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rubber for the impact head (paragraph [0024]), but he fails to specify the use of silicone rubber. Isaacson ('495) teaches the use of silicone rubber for an impact head for its favorable properties of plasticity, pliability and compressibility (column 4, lines 34-37). Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to make the impact head of silicone rubber for its favorable properties of plasticity, pliability and compressibility.

12. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang (2002/0169400) in view of Orgeron et al. (6,368,293). Huang ('400) discloses the invention substantially as claimed, except for the use of plastic for the central insert (screw). Orgeron et al. ('293) teach the use of plastic screws (62) in a vibrating device, which advantageously facilitates manufacturing of the screw, helps reduce the overall weight of the device, and also provides a sturdy, reliable support/connection means. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to choose plastic for the central insert in order to promote ease of manufacturing and reduce the weight of the device while also providing a reliable support/connections means.

Regarding the use of a rigid/semi-rigid plastic, the plastic of Orgeron et al. ('293) is deemed to be at least somewhat rigid, as it allows for a secure, unyielding connection.

Conclusion

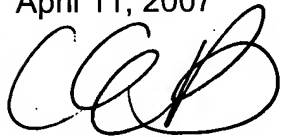
13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Luetngen et al. (7,122,015), Gonzalez (6,830,552), Shimizu (5,305,738), Höyer (2,017,400), Tucek et al. (6,537,236), Tucek (6,602,211), Tucek et al. (7,169,169), Miller (2005/0187498), Dungan (6,228,042), Colloca et al. (7,144,417), Ko (2006/0041208), Chubinsky (5,843,005), Calvert (2006/0155224), Chai (2006/0173389), Sabo et al. (2003/0009118), Zurbay (5,817,037), Flanz (2001/0010105), Wu (6,964,214), Rojdev et al. (5,519,923), Wallace (3,900,183) and Luna (6,244,356) are cited to show related inventions.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Candace Brakewood whose telephone number is 571-272-3115. The examiner can normally be reached on Monday-Thursday, 7am-5:30pm.

15. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi Rada can be reached on 571-272-4467. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

16. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Candace Elizabeth Brakewood
Patent Examiner
April 11, 2007



Rinaldi I. Rada
Supervisory Patent Examiner
Group 3700